

SPECIFICATION

BEZEL MOUNTING ASSEMBLY

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

[0001] The present invention relates to a mounting assembly, and more particularly to a computer bezel mounting assembly with a simplified configuration for convenient use.

2. DESCRIPTION OF RELATED ART

[0002] A conventional front bezel is mounted to a computer case by way of a plurality of setscrews or fasteners being engaged in a plurality of fixing holes of the computer case. A typical bezel mounting assembly is disclosed in Taiwan Patent No. 285,315. The mounting assembly comprises a chassis and a front bezel. Front portions of two side walls of the chassis define a plurality of receiving slots. Side edges of the front bezel have a plurality of barbs, the barbs engaging in the corresponding slots of the chassis and thereby connecting the front bezel to the chassis. However, the mounting assembly utilizes many barbs on the front bezel, and it is inconvenient and laborious to detach the front bezel from the chassis. In addition, the barbs are easily broken when too much force is applied to detach the front bezel.

[0003] Another typical bezel mounting assembly is disclosed in Taiwan Patent No. 200,980. The bezel mounting assembly comprises a front bezel, a chassis and a plurality of metal clip members mounted on top of corresponding posts formed on the front bezel. The circumferential edge of the chassis defines a plurality of slots corresponding to the arrangement of

the posts. Each metal clip comprises a planar fixing portion, a vertical supporting portion and a guiding portion. A mounting dent is defined between the supporting portion and the guiding portion. The guiding portion is passed through the corresponding slot of the chassis until an edge of the slot becomes blocked in the mounting dent. In this way, the front bezel is mounted to the chassis. However, the mounting assembly utilizes a plurality of additional separate members having specific configurations. This requires extra time and resources to manufacture, and adds to costs. Moreover, it is laborious and inconvenient to detach all the clip members tightly engaged in the slots. Another similar bezel mounting assembly is disclosed in US Patent No. 5,123,680.

SUMMARY OF THE INVENTION

[0004] Accordingly, an object of the present invention is to provide a mounting assembly, such as one for mounting of a computer bezel, which has a simplified configuration and which is convenient to use.

[0005] To achieve the above object, a mounting assembly includes a bezel and a chassis. The chassis comprises a front panel defining a plurality of fixing slots along one side and a plurality of mounting openings along the opposite side, each mounting opening comprises a large zone and a smaller zone communicating with each other. The bezel extends a plurality of posts provided with a pivot means and a plurality of hooks. The pivot means is a fixing member capable of extending through the large zone of a corresponding mounting opening and sliding into the smaller zone, thereby pivotably attaching the bezel to the chassis, and the hooks can be engaged in the fixing slots thereby securing the bezel on the chassis.

[0006] Other objects, advantages and novel features of the present

invention will be drawn from the following detailed description of preferred embodiments of the present invention with the attached drawings, in which:

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Fig. 1 is an exploded, isometric view of a bezel mounting assembly in accordance with a preferred embodiment of the present invention;

[0008] Fig. 2 is a partly assembled view of Fig. 1, viewed from another aspect;

[0009] Fig. 3 is a fully assembled view of Fig. 1; and

[0010] Fig. 4 is an exploded, isometric view of a bezel mounting assembly in accordance with an alternative embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0011] Referring to Figs. 1 through 3, a bezel mounting assembly in accordance with the preferred embodiment of the present invention comprises a bezel 10 and a chassis 60 (only a portion thereof is shown).

[0012] The bezel 10 is generally rectangular. Flanges (not labeled) extend perpendicularly inwardly from circumferential edges of the bezel 10. The bezel 10 inwardly forms a plurality of posts 12 along one longitudinal side thereof. Each post 12 defines a fixing hole 13 therein. A plurality of resilient hooks 14 integrally extends from a longitudinal flange of the bezel 10 opposite from said longitudinal side. Each hook 14 forms a barb 16 at a free end thereof. The fixing hole 13 of each post 12 is for engagingly receiving a fixing member 24 therein. The fixing member 24 comprises a

head portion 26, and a fixing portion 28 extending from the head portion 26 and engaging in the fixing hole 13. In the preferred embodiment of the present invention, the fixing member 24 is a screw. In addition, in an alternative embodiment, the fixing members 24 may be integrally formed with the corresponding posts 12.

[0013] The chassis 60 comprises a front panel 62 and a side panel 64. The front panel 62 defines a plurality of mounting openings 22, corresponding to the fixing members 24 engaged in the posts 12 of the bezel 10. That is, the mounting openings 22 are arranged along one longitudinal side of the front panel 62 of the chassis 60 that is opposite from the side panel 64. Each mounting opening 22 is elliptical, comprising a central large zone 63 and two smaller zones 65 on respective opposite sides of and in communication with the large zone 63. The front panel 62 of the chassis 60 defines a plurality of fixing slots 42, corresponding to the hooks 14 of the bezel 10.

[0014] In assembly, the head portions 26 of the fixing members 24 engaged with the posts 12 are passed through the large zones 63 of the mounting openings 22. Then the bezel 10 is moved to make the head portions 26 of the fixing members 24 slide into corresponding smaller zones 65 of the mounting openings 22. The bezel 10 is rotated until the hooks 14 of the bezel 10 are engaged in the fixing slots 42 of the front panel 62, with the barbs 16 of the hooks 14 snappingly engaging with edges of the front panel 62 at the fixing slots 42.

[0015] In disassembly, the longitudinal flange of the bezel 10 is pulled by hand away from the front panel 62. The hooks 14 are thereby detached from the fixing slots 42 of the chassis 60. Then the bezel 10 is moved to

make the head portions 26 slide out of the smaller zones 65 of the mounting openings 22 into the large zones 63 of the mounting openings 22. The bezel 10 is then easily removed from the front panel 62 of the chassis 60.

[0016] Referring to Fig. 4, a bezel mounting assembly in accordance with the alternative embodiment of the present invention comprises a bezel 10' and a chassis 60'. The chassis 60' comprises a front panel 62'. The bezel 10' is substantially the same as the bezel 10 of the preferred embodiment. However, a front panel 62' of the chassis 60' defines a plurality of mounting openings 22' along one longitudinal side thereof. Each mounting opening 22' comprises a rectangular large zone 63', and a rectangular smaller zone 65' in communication with the large zone 63'. Assembly and disassembly of the bezel mounting assembly of the alternative embodiment are substantially the same as that described above in relation to the bezel mounting assembly of the preferred embodiment.

[0017] While the present invention has been illustrated by the description of preferred embodiments thereof, and while the preferred embodiments have been described in considerable detail, it is not intended to restrict or in any way limit the scope of the appended claims to such detail. Additional advantages and modifications within the spirit and scope of the present invention will readily appear to those skilled in the art. Therefore, the present invention is not limited to the specific details and illustrative examples shown and described.